SOME NOTES ON THE BIRDS OF OKANAGAN, BRITISH COLUMBIA.

BY ALLAN BROOKS.

THE following notes comprise the more important results of the last few years' field work in the Okanagan district. While the greater portion of the Okanagan Valley lies in the Transition Zone, the thirty miles running north from the International boundary evidently belong to the Upper Sonoran, as characterized by the luxuriant growth of greasewood, and the presence of such Sonoran forms as horned toads (*Phrynosoma*), and jack rabbits (*Lepus texianus*). It is in this southern portion of the district, in the neighborhood of Osoyoos Lake, that the additions to the Canadian fauna can be expected to occur. Mr. C. deB. Green who resides at this point has recently devoted much of his time to ornithology, and I am indebted to him for some most interesting records.

Undoubtedly many more Great Basin forms will occur; some of them, such as Cañon Wren and Sage Sparrow, have already been fairly well identified by Mr. Green, but they are not included in this list, as specimens have not been taken.

The lower portion of the Similkameen Valley also lies in the Upper Sonoran zone, the rainfall here reaching the minimum for Canada, averaging only three inches yearly.

Recurvirostra americana. AMERICAN AVOCET.— During twenty years collecting in British Columbia I have kept a special lookout for this bird, but not until April 28 of the present year have I ever come across it. On that date a flock of fifteen arrived at the north end of Okanagan Lake and I secured six of them — five adult females with ovaries enlarged, and one young male, which would not have bred this year. This would indicate that the species does not pair until its arrival at its breeding grounds. This is the first record for the Province.

Nycticorax nycticorax nævius. BLACK-CROWNED NIGHT HERON.— On the evening of August 3 of the present year I saw a bird that could have been nothing but a Night Heron, at Okanagan landing. It had a rather quick bittern-like flight and continuously uttered a hoarse quack, quite different from the note of a bittern. It circled twice around my canoe in response to an imitation of its cry and then continued its journey southward, quacking at regular intervals.

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Totanus solitarius. Solitary Sandpiper.

Totanus s. cinnamomeus. WESTERN SOLITARY SANDPIPER. — Both forms of the Solitary Sandpiper occur in the Okanagan district in about equal numbers, as is proved by a series collected by myself in the past four years. Neither breed, though young with down still adhering have been taken.

Falco mexicanus. PRAIRIE FALCON.— The Prairie Falcon occurs throughout southern British Columbia but the only locality I have found it breeding is in the southern portion of the Okanagan district. A pair had a nest in a cliff near the residence of Mr. C. deB. Green at Osoyoos Lake; near by was the eerie of another falcon — a Peregrine — the male of which incessantly badgered the female Prairie Falcon, with a series of splendid stoops.

Falco peregrinus pealei. PEALE'S FALCON.— In the semi-arid interior one would naturally expect to find the pale form of the Peregrine, but while the adults are not particularly dark, the young are fully as dark as the darkest specimens I have seen on the coast.

In the young the whole mantle is sooty black, the feathers edged with cinnamon — not whitish or buffy as in typical *anatum*. The lower surface is heavily streaked. Still it is well known among falconers how the young of these falcons vary, even in the same localities, so I place these only provisionally under *pealei*.

Falco columbarius. PIGEON HAWK.— The breeding Merlin is nearly pale enough for *richardsoni* but the number of tail bars agrees with *columbarius*.

Young birds that I take to be *richardsonii* occur on migrations, but I have only once taken *suckleyi* east of the Cascades, a young female taken in August, 1907, at Okanagan Landing.

In the very large number of Merlins that I have collected or examined in British Columbia, representing all three subspecies, only one *suckleyi* showed any approach to *columbarius*, while a number of puzzling intergrades between *columbarius* and *richardsonii* have been noted.

Otus asio kennicottii. KENNICOTT'S SCREECH OWL.— The Screech Owls of the Okanagan and Osoyoos districts, while averaging rather paler than coast specimens, are nearer the above form than the Rocky Mountain subspecies, maxwelliæ.

Otus flammeola idahoensis. DWARF SCREECH OWL.— In November, 1902, I picked up a dilapidated specimen of this little owl on the beach at Penticton at the south end of Okanagan Lake. This is the only Canadian record.

Sphyrapicus thyroideus. WILLIAMSON'S SAPSUCKER.— When surveying in the hills near Fairview in the Osoyoos district Mr. C. deB. Green had a male of this sapsucker within close range for some time. With his transit telescope he was enabled to note every feather, and described the markings so minutely that there can be no doubt of the species.

There is also an old record for Similkameen made I think by R. V. Griffin.

Aëronautes melanoleucos. WHITE-THROATED SWIFT.— This is another species, new to Canada, that I have so far been unable to secure specimens of. Three or four pairs bred in the summer of 1907 in the high cliffs at the outlet of Vaseux Lake; they were daily seen by Mr. Green and two other close observers and there can be no doubt as to their identity.

Otocoris alpestris arcticola. PALLID HORNED LARK.— Mr. Green this year took the eggs of the Pallid Horned Lark on the high mountains above timber line, between the Okanagan and Similkameen valleys and collected the female, which is now in my collection.

This is the breeding form on all the high mountains of the Province, *Otocoris a. merrilli* being restricted to the arid lower levels; nowhere do their breeding ranges impinge on each other.

Nucifraga columbiana. CLARKE'S NUTCRACKER.— Clarke's Nutcracker is a fairly common though irregular breeder at low elevations throughout the Okanagan district. I took two nests March 23 and 30, 1906, both in ponderosa pine trees, and Mr. Green has taken three more this year at Osoyoos. Two broods are reared, as I have seen nestlings being fed in June.

Dolichonyx oryzivorus. BOBOLINK.— A regular summer visitant and increasing. Breeds as far north as Lumby; common at Penticton.

Coturniculus savannarum bimaculatus. Western Grasshopper Sparrow.-- Scarce breeder from Vernon south.

Chondestes grammacus strigatus. WESTERN LARK SPARROW.— Common breeder at Osoyoos, scarce at Vernon.

Zonotrichia leucophrys gambeli. INTERMEDIATE SPARROW.— The Intermediate White-crowned Sparrow breeds from 1200 feet (Okanagan Landing) up to timber line (Osoyoos district).

Spizella breweri. BREWER'S SPARROW.— This year Mr. Green found Brewer's Sparrow a fairly common resident in sage brush areas at Osoyoos. Previous to this the only records 1 am aware of were Mr. Rhoads's at Ashcroft, and one taken by myself on migration at Vernon. My record for 158-mile House, Cariboo district, proved a mistake of identity, the two males taken being *Spizella pallida*— also new to the British Columbian list.

Junco hyemalis montanus?— The Juncos of the Okanagan district are very puzzling. Dr. Dwight tells me that two I have sent him are very close to *montanus*, others are typical *shufeldti*, while during migrations a bewildering range of variation can be seen.

Roughly speaking, the wintering birds and those that breed at high altitudes are typical *shufeldti*, those breeding in the Pine belt approach *montanus*, while the migrating hordes show a very large admixture of *hyemalis*, typical examples of which I have taken as far west as the west slope of the Cascades at Chilliwack.

Lanius ludovicianus gambeli. CALIFORNIA SHRIKE.— Mr. Green sent me a very dark example of the California Shrike taken at Osoyoos in March of the present year — the second record for British Columbia.

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Icteria virens longicauda. LONG-TAILED CHAT.— A common breeder at Osoyoos; rare at Vernon.

Oroscoptes montanus. SAGE THRASHER.— This is another species the addition of which to the Canadian list is due to the energy of Mr. Green. He reports it as a scarce local breeder in the sage brush country of Osoyoos district, and has sent me a handsome set of four eggs with the male bird collected 21st June of this year.

THE DESTRUCTION OF BIRDS AT NIAGARA FALLS.

BY LEON J. COLE.

IN HIS interesting account, in the July 'Auk,' of the destruction of a large number of Whistling Swans at Niagara Falls, on May 15, 1908, Fleming ¹ mentions that birds have been killed by going over the Falls in times past. In this same connection the following extracts from what is said to be the first description of Niagara Falls published in the English language may be of interest to ornithologists. The extracts are from ''A Letter from Mr. Kalm, a Gentleman of Sweden, now on his Travels in America, to his Friend in Philadelphia; containing a particular Account of the Great Fall of Niagara,'' written at Albany, September 2, 1750. This account first came to my notice in the recent excellent monograph on 'The Falls of Niagara,' by Professor Spencer,² in which it is republished as an appendix; but in quoting I have taken directly from a reprint of the original account of John Bartram³

¹ Fleming, James H. The destruction of Whistling Swans (*Olor columbianus*) at Niagara Falls. Auk, Vol. XXV, pp. 306-309, 1908.

 $^{^2}$ Spencer, Joseph William Winthrop. The Falls of Niagara; their evolution and varying relations to the Great Lakes; characteristics of the power, and the effects of its diversion. Canada Dept. of Mines, Geol. Surv. Branch, 1905–6, xxxii + 490 pp., pls. and maps. 1907.

³ Observations | on the | Inhabitants, Climate, Soil, Rivers, Productions, | Animals, and other matters worthy of Notice, | Made by | Mr. John Bartram, | in his Travels from | Pensilvania | to | Onondago, Oswego and the Lake Ontario, | In Canada. | To which is annex'd, a curious Account of the | Cataracts at Niagara. | By Mr. Peter Kalm, | A Swedish Gentleman who travelled there. | London: | Printed for J. Whiston and B. White, in | Fleet-Street, 1751. [Reprinted by W. F. Humphrey, Geneva, N. Y., 1895.] viii + 94 pp.